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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D407-667-205
Job Sheet 181961



Part No: D407-667-205

Job Qty: 1 ea

Part Name: Aft Crosstube - High 407



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 8/14/18

Job Tracking No:

Due Date: 8/31/18

Created By: Jesse White

Type: Stock

Description:

Note: DWG REV G IPP Rev:C 05.09.02 Add holes for comp. w/ Bell's J/K/JLM IPP Rev:D Add Magnobond,Rubber Cushion,Clamps 07-02-19 JLM IPP Rev:E 08-05-22 add comment seq. 6 & QC15 & QC5 DD verf:EC IPP Rev:F 08-06-12 add comment seq. 24 DD verf:EC IPP Rev:G 08-08-19 revE per dwg DD verf:EC IPP Rev H 09.01.06 ECN 08-562 EC verf:DD IPP Rev:I 10.04.07 revise route seq. in bom DD verf:JLM IPP Rev J 11.04.26 removed abrasion strip ecn 11-551 EC verf:DD IPP REV:K 11.10.03 DEOD407-667-245-F-2 DD verf:EC

Ship Via:

Bill of Materials

Job Routing									
Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	1 Ea	8/31/18	8/31/18	0.00	0.00	Start Up Stores/Pkg-1		DP2 8/16/18
110	Packaging	1 pcs	8/31/18	8/31/18	0.00	0.00	Packaging1-4		DP2 8/16/18
120	CNC Bend Skidtubes	1 pcs	8/31/18	8/31/18	1.99	3.33	CNC Bend Skidtube		DP2 8/16/18
130	QC	1 pcs	8/31/18	8/31/18	0.00	0.00	QC15		
140	Crosstubes	1 pcs	8/31/18	8/31/18	0.00	3.47	Crosstubes-2		2018-08-23
150	HandFXtube	1 pcs	8/31/18	8/31/18	0.00	0.91	HandFinish5		2018-08-23
160	QC	1 pcs	8/31/18	8/31/18	0.00	0.00	QC7-3		
170	QC	1 pcs	8/31/18	8/31/18	0.00	0.00	QC5		
180	Outsource	1 pcs	8/31/18	8/31/18			SKY002-VC	2	
190	Packaging	1 pcs	8/31/18	8/31/18	0.00	0.00	Packaging2		SEP 13 2018
200	QC	1 pcs	8/31/18	8/31/18	0.00	0.00	QC6		
210	SprayPaint	1 pcs	8/31/18	8/31/18	0.00	1.39	Spray Paint		11/09/18
220	QC	1 pcs	8/31/18	8/31/18	0.00	0.00	QC14		
230	Crosstubes	1 pcs	8/31/18	8/31/18	0.00	3.47	Crosstubes-2		
240	QC	1 pcs	8/31/18	8/31/18	0.00	0.00	QC5		
250	Packaging	1 pcs	8/31/18	8/31/18	0.00	0.00	Packaging1-4		NOV 2 9 2018
260	QC	1 pcs	8/31/18	8/31/18	0.00	0.00	QC4		
265	DC	1 pcs	8/31/18	8/31/18	0.00	0.00	DC		NOV 2 9 2018
270	Packaging	1 pcs	8/31/18	8/31/18	0.00	0.00	Packaging3-2		
280	QC21-FG	1 Ea	8/31/18	8/31/18	0.00	0.00	QC21		NOV 2 9 2018

Part Op 120 - 1-Bend tube as per Dwg D407-667-245 using CNC bender program 407 Aft and Folio 21

Descriptions: 140 - ***** ENSURE PROPER JIG POSITIONING BEFORE DRILLING***** , VERIFIED BY: ***** 1-Drill pilot holes in tube using drill Jig DT8583 & DT8584 as per Dwg D407-667-245. Drill all (3) top holes. Holes facing inboard. Drill and Ream all holes in tube to finish size using drill Jig DT8583 & DT8584 as per Dwg D407-667-245 2- Drill fwd rivet holes using drill Jig DT8787 fwd as per Dwg D407-667-245. Note: FWD side has 3X top holes facing inboard. 3- C'sink holes as per dwg D407-667-245. Allow rivet to sit below surface to compensate for paint. 4- Flip tube and switch drilling Jigs from right to left, left to right. Locate Jigs off existing holes using "T" pins. Drill ONLY 2 top holes ONLY plug most bottom hole to prevent accidental drilling. Drill holes and ream using drill Jig DT8583 & DT8584 as per Dwg D407-667-245. Drill only the top (2) holes. Drill & ream the top (2) holes to finish size using drill Jig DT8583 & DT8584 as per Dwg D407-667-245 5-Drill aft rivet holes using drill Jig DT8787 aft as per Dwg D407-667-245. Drill only the top (2) holes. 6- C'sink holes as per dwg D407-667-245. Allow rivet to sit below surface to compensate for paint. 8-*** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***Debur & Inspect for surface damage. Repair damage within limits as per Dwg D407-667-245

150 - ***IMMEDIATELY AFTER GRINDING***

180 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 0380

190 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***

200 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE***

210 - *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** 1-Prime inside and outside crosstube as per DEO D407-667-245 and QSI 005 4.2 ***Mask underside of crosstube as shown*** 3- Apply clear coat as per dwg Clear Coat Batch: 138832 Prime 138962 Paint 138956

220 - Then,Wrap in plastic bag to protect from scratches

230 - 1- Install chafing shield as per D407-667-245 using DT10096 to establish 8.90 dimension.Top holes should be facing up. ****Ensure chafing is to be position "overlap" AFT**** A/R Proseal 890 Batch: 5016394 EXP: 3/19 2- Lightly scuff the bonded area using a 320 grit sand paper and clean the area with 41058 wash 'n' wipe 3-Install support with Scotch-Weld DP460 and install clamps as per Dwg D407-667-245 using installation jig DT9025. Torque clamps as per dwg A/R Scotch-Weld DP460 Batch: 5064031 EXP: 4/19 ***LET CURE FOR 24 HOURS*** CURE TIME: START: 10/10/18 FINISH: 10/10/18 4-Install nut plates as per Dwg D407-667-245. Touch-up rivet heads with Imron paint.

240 - ***RE-CHECK TORQUE ON CLAMPS AFTER ADHESIVE HAS CURE FOR 24HOURS AS PER DWG DEO***

265 - Photocopy bluefile and create labels as per PPP D407-667-205 CHG009

270 - Identify and in kanban rack

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Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
D407-667-205TRN	Crosstube Turning Detail	1 Ea (1 ea)	90-Start up Operation	
D2873-043	Nut Plate Assembly	2 Ea (2 ea)	230-Crosstubes	
D2873-045	Nut Plate Assembly	2 Ea (2 ea)	230-Crosstubes	
D2894-1	2.75 Support	1 Ea (1 ea)	230-Crosstubes	
D3190-1	Chaffing Shield	2 Ea (2 ea)	230-Crosstubes	
D3595-063-430	Rubber Cushion 0.63" Wide X 4.30" Long	2 Ea (2 ea)	230-Crosstubes	
MS20601-AD4W8	Rivet	14 Ea (14 ea)	230-Crosstubes	
MS21920-22	Clamp	4 Ea (4 ea)	230-Crosstubes	
MS21920-25	Clamp	2 Ea (2 ea)	230-Crosstubes	
NAS1149D0563J	Washer	18 Ea (18 ea)	230-Crosstubes	5050053
AN5-10A	Bolt	10 Ea (10 ea)	250-Packaging	5099283
AN5-32A	Bolt	4 Ea (4 ea)	250-Packaging	5059983-1
AN5-34A	Bolt	4 Ea (4 ea)	250-Packaging	509410
MS21042L5	Nut	4 Ea (4 ea)	250-Packaging	509352

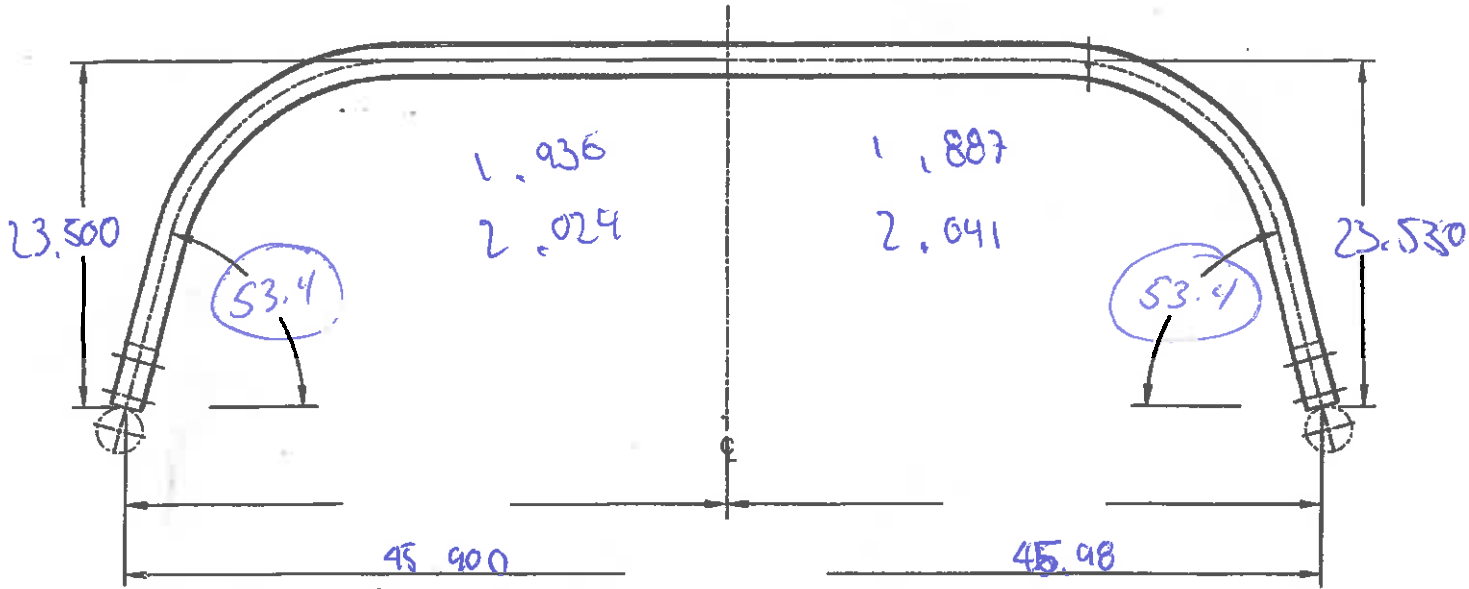
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation 230-Crosstubes	D407-667-205TRN	1	8	0
	D2873-043 5090584	2	109	0
	D2873-045 5050602	2	23	0
	D2894-1 5054506	1	10	0
	D3190-1 138928	2	69	0
	D3595-063-430 5074227	2	40	0
	MS20601-AD4W8 5066928	14	228	0
	MS21920-22 5105481	4	83	0
	MS21920-25 5107731	2	116	0
	NAS1149D0563J	18	2,086	0
	AN5-10A	10	303	0
	AN5-32A	4	365	0
250-Packaging	AN5-34A	4	89	0
	MS21042L5	4	1,100	0

Part Specifications				
Specifications could not be found.				

Plex 8/14/18 11:24 AM dart.white.jesse

DART AEROSPACE LTD		Work Order:	
Description: Crosstube High Aft (407)		Part Number:	D407-667-205
Inspection Dwg: D407-667-245 Rev: G		Page 1 of 1	

Required Dimension	Min	Max
Height	23.39	23.65
1/2 Span	45.79	46.05
Angle	54	56
Total Span	91.58	92.100
Bending Passes	6	--
Crushing	--	6%



	Side A	Side B
Bending Passes	2.7	2.7
Crushing	2.2%	3.9%
Comments		

QC15 Inspection	
Date	

Rev	Date	Change	Revised by	Approved
A	07.02.06	New Issue	KJ/JM	
B	09.06.22	Dwg Rev updated	KJ	
C	11.08.22	Dimensions updated	KJ	
D	11.09.30	Dimensions updated	KJ	
E	12.04.16	Added bending, crushing dimensions	KJ	
F	15.05.14	Dwg Rev updated	KJ	

Item	QTY	PART NUMBER	DESCRIPTION
	-245		
	X	D407-887-245	CROSSTUBE ASSEMBLY (407 HIGH AFT)
1	1	D8011-115	CROSSTUBE
2	2	D2879-043	NUT PLATE
3	2	D2873-045	NUT PLATE
4	1	D2894-1	SUPPORT
5	2	D3180-1	CHAFING SHIELD
6	2	D3595-063-430	RUBBER CUSHION
7	14	MS20601AD1W8	RIVET (OR NAS83D2B-4-8)
8	4	MS21920-22	CLAMP
9	2	MS21920-25	CLAMP (OR MS21920-24)
10	AR	SCOTCH-WELD DP480	EPOXY ADHESIVE, 3M SCOTCH-WELD
11	AR	PROSEAL 890	SEALANT

GENERAL NOTES:

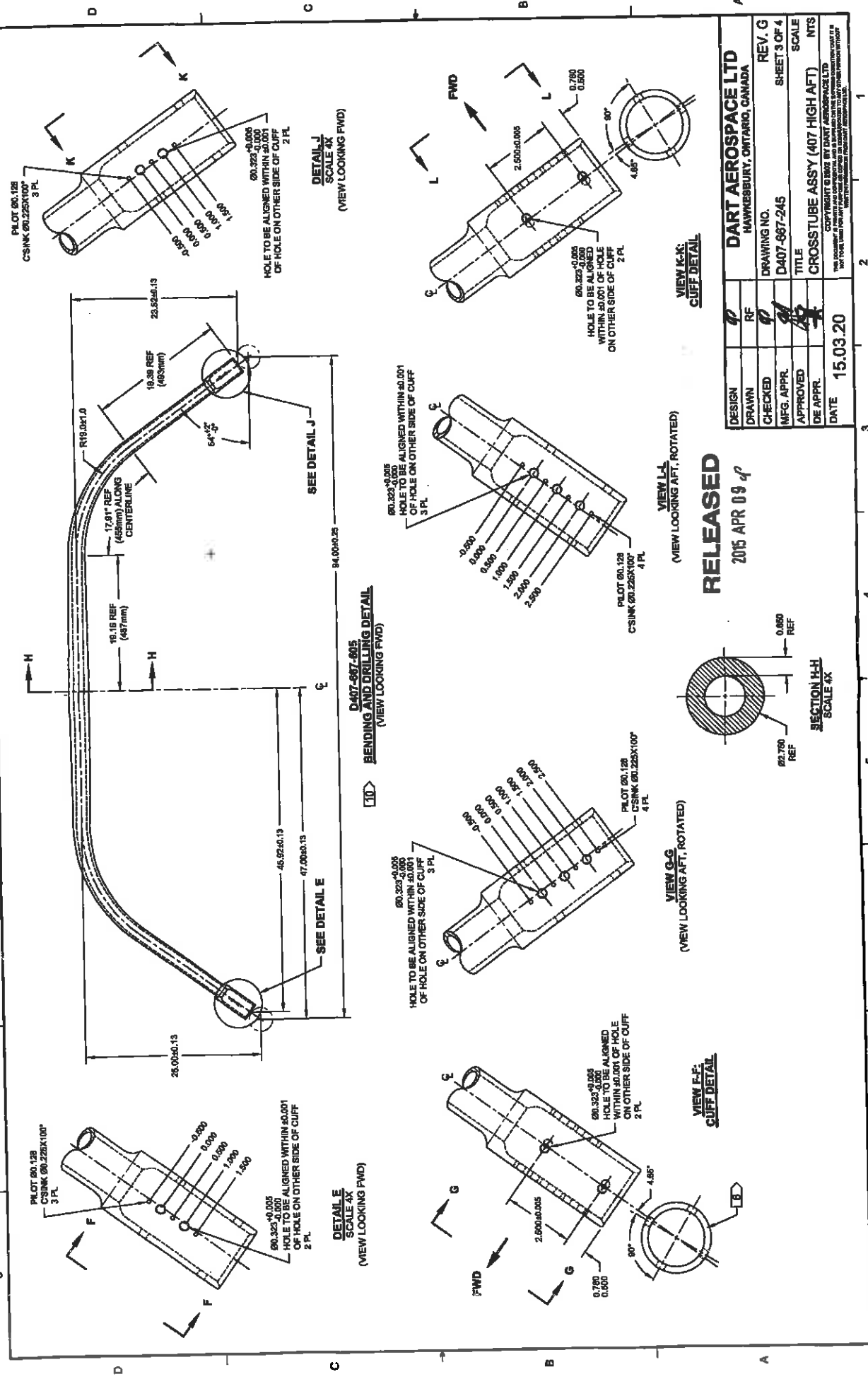
- 1) MATERIAL: MANUFACTURED FROM D8011-115
FINISHED LENGTH = 112.91±0.020
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
PRIME INSIDE AND OUTSIDE PER DART QSI 005 4.2
PAINT CROSSTUBE PER DART QSI 005 4.2
FOR HATCHED AREAS (ZN AB-2), MASK AS REQUIRED
TO APPLY PRIME AND APPLY CLEAR COAT ONLY
TO APPLY PRIME AND APPLY CLEAR COAT ONLY
TO APPLY PRIME AND APPLY CLEAR COAT ONLY
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- 4) BREAKS SHARP EDGES: 0.005 TO 0.010 MAX.
- 5) IDENTIFICATION: SCRIBE DART PART NUMBER "D407-887-245" AND BATCH NUMBER ON INSIDE OF CLIFF USING VIBRATING STYLUS.
- 6) WEIGHT: 27.7 lbs
- 7) PART IS SYMMETRIC ABOUT CENTERLINE.
- 8) RUN-OFF PART, BLEND OUT EDGE LONGITUDINALLY. TRANSITION SHOULD BE SMOOTH.
- 9) BENDING IS 8% BASED ON O.D.
- 10) LIQUID PENETRANT INSPECT OUTSIDE SURFACE OF CROSSTUBE PER QSI 008.
- 11) INSTALL D2894-1 CENTER SUPPORT USING A 0.04" TO 0.07" THICK LAYER OF SCOTCH-WELD DP480 PER QSI 015. LET CURE FOR 24 HOURS AFTER INSTALLATION AND PRIOR TO PACKAGING.
- 12) INSTALL MS21920-25 CLAMPS WITH D3595-063-430 RUBBER CUSHIONS TO SECURE D2894-1 SUPPORT ON TOP SIDE OF THE CROSSTUBE. ENSURE CLAMPS ARE OPPOSITE CROSSTUBE SUPPORT.
- 13) NOTE: MS21920-24 CLAMPS CAN BE USED TO ACCOMMODATE VARYING DIAMETERS. ENSURE THERE IS A MINIMUM OF 1.5 THREADS IN SAFETY ON THE NUTS. EXTREME CARE MUST BE TAKEN TO PROTECT THE OUTSIDE SURFACE OF THE TUBE. THE OUTSIDE SURFACE MUST BE SMOOTH AND FREE FROM SURFACE DEFECTS SUCH AS SCRATCHES, NICKS, OR DENTS. DEFECTS UP TO 0.005" MAY BE BLENDED OUT LONGITUDINALLY. CIRCUMFERENTIAL GRIND MARKS ARE UNACCEPTABLE.
- 14) APPLY A THIN COAT OF PROSEAL 890 ON INSIDE CONCAVE SURFACE OF D3180-1 CHAFING SHIELDS AND LET CURE PER MANUFACTURER'S INSTRUCTIONS. INSTALL PROSEAL 890 ONTO CROSSTUBE. BE SURE TO ELIMINATE ANY AIR GAPS.
- 15) OF CROSSTUBE OPPOSITE D2894-1 SUPPORT.
- 16) INSTALL D3180-1 CHAFING SHIELDS SO THAT OVERLAP IS 50 TO 70 DEGREES FROM BOTTOM IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER ADHESIVE HAS CURED FOR 24 HOURS.
- 17) TORQUE CLAMPS 80 TO 100 IN-LB. TORQUE CLAMPS ON D3180-1 CHAFING SHIELD 40 TO 50 IN-LB. ENSURE AT LEAST 1.5 THREADS ARE SHOWING IN SAFETY AND THAT NUT HAS NOT BOTTOMED-OUT AFTER TORQUING. PRIOR TO PACKAGING, RE-CHECK TORQUE ON CLAMPS AFTER ADHESIVE HAS CURED FOR 24 HOURS.

G	INCCORP. DEO'S D407-887-245-F1/F2 (ZN D8-1, AB-1, D5-2, BE-2, C8-2); 8.90 WAS 8.83 (ZN D5-2); TORQUE REDUCED FOR CHAFING SHIELD (ZN AB-1); FINISH REVISED TO ALLOW MANUFAC. FLEXIBILITY (ZN C8-1); REFORMAT NOTES TO NEW STANDARDS (ZN BE-1); RELOCATED FLAG # 8 (ZN AB-3) PER NCR 210; REMOVED REF. & ADD TOLERANCES (ZN C8-3, C4-3 & D2-3)	RF	15.03.20
F	RELOCATED FLAG # 8 (ZN AB-3) PER NCR 210; REMOVED REF. & ADD TOLERANCES (ZN C8-3, C4-3 & D2-3)	RF	08.11.06
E	8.02 AND 8.53 WERE 8.40 AND 8.50 (ZN D5-2); REORGANIZED VIEWS AND REFORMAT DRAWING TO CURRENT STANDARDS. REASONS: CLAMP#9 MOVED 0.375 TOWARD CL TO ELIMINATE INTERFERENCE WITH AIRCRAFT MOUNTS. REFERENCE: PAR808-21 AND ECR#1223	MB	08.07.24
D	ADD VIEW FOR OEM SKID HOLES, ROTATE ORIENTATION OF CLAMPS SECTION F-7, REMOVE -851 ABRASION STRIP, ADD MAGNABOND 6396, ADD CUSHION	PH	07.02.07
C	ADD HOLES AND NUT PLATES FOR COMPATIBILITY WITH BHT/AA SKIDTUBES	PH	05.07.28
B	ADD CHAFING SHIELD	CP	03.05.21
A	NEW ISSUE	CP	02.05.13
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
CHECKED	RF		
MFG. APPR.	D407-887-245		
APPROVED	DE		
DATE	15.03.20		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. D407-887-245			
TITLE CROSSTUBE ASSY (407 HIGH AFT)			
SHEET 1 OF 4			
SCALE NTS			
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ALL RIGHTS RESERVED. NO PART OF THIS DOCUMENT MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.			

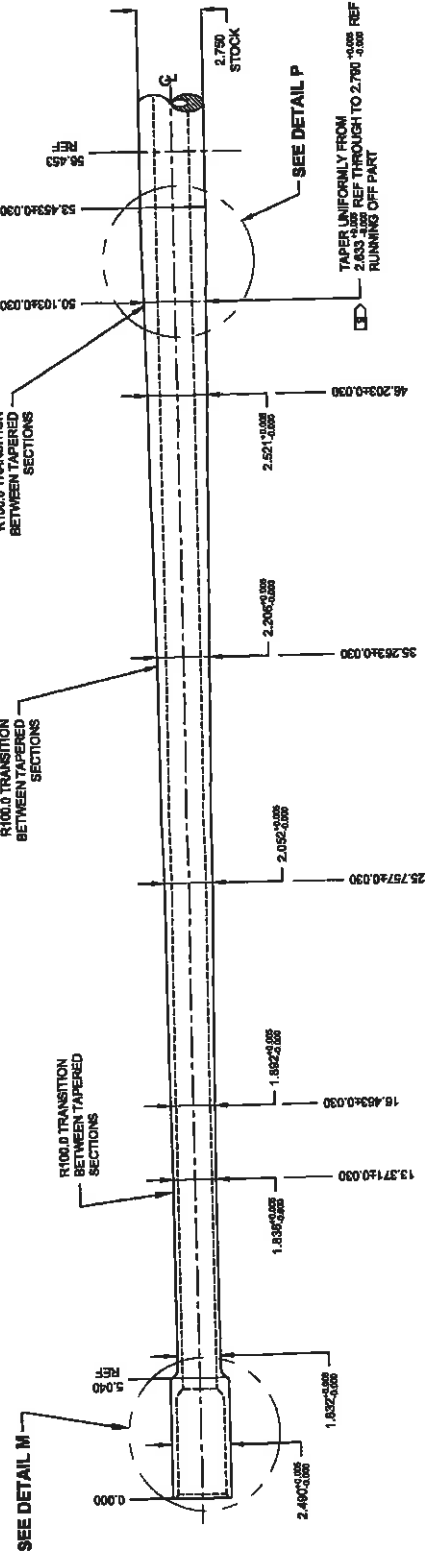
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2015 APR 09

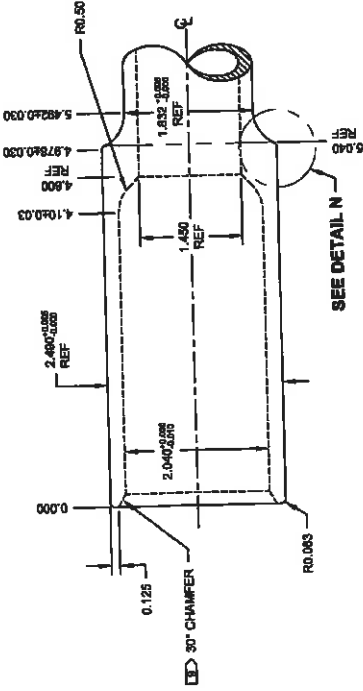
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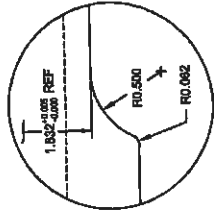
RELEASED
2015 APR 09 *cl*



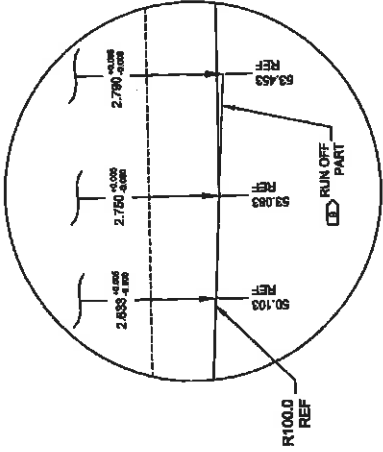
D407-667-245 MACHINING DETAIL



DETAIL M: CROSSTUBE CUFF
SCALE 3X



DETAIL N: CUFF TRANSITION
SCALE 2X



DETAIL P: TAPER RUN-OFF
NOT TO SCALE

RELEASED
2015 APR 09

DESIGN	7	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
DRAWN	7	RF	REV. G
CHECKED	7	RF	DRAWING NO.
MFG. APPR.	7	RF	D407-667-245
APPROVED	7	RF	SHEET 4 OF 4
DE APPR.	7	RF	TITLE
DATE	15.03.20	7	CROSSTUBE ASSY (407 HIGH AFT)
		7	SCALE
		7	NTS

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Entered: _____ Date: _____

NCR No.

19-7305

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only



Job:

181961

Part No.

0407-667-205

Date:

18/8/20

Sequence #:

Description Work Order Deviation

QTY Affected:

Disposition

MRB (QS1042)

1 MSP
12 9/18/4/20

After bending: Angles are under tolerance.

Acceptable.
Will not cause fit issue.

Completed By

9/18/6/20

Lead hand / Supervisor

APD 9.2.11

QA Coordinator

55

9-89 19-7-11

Root Cause

Operator	☒
Manufacturing Process	☐
Equip/Tooling	☐
Handling/Preservation	☐
Material	☐
Product Improvement	☐
Process Improvement	☐
Human Factors	☐

Pressure/Forced	☒
Bending	☒
Crushing	☐
Cracks	☐
Crimp/Kink/Ripple/Wave/Twist	☐
Marks/Chatter	☐
Mislabeled	☐

Other/Details:

FAULT CATEGORY

Contamination	☐
Misaligned/off center	☐
BOM/Route	☐
Broken/Damage/Defect	☐
Incomplete/Unclear Instructions	☐
Drill Holes	☐
Fit/Function	☐

Power Loss/Surge	☐
Folio/Program	☐
Grain Direction	☐
Weld	☐
Wrong Stock Pulled	☐
Out of Sequence	☐
Off-set/Set-up	☐

Positioned Wrong	☐
Outside Tolerance	☒
Drawing	☐
Finish	☐
Part Lost/Missing	☐
Misread	☐



Dart Aerospace Ltd.
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Hawkesbury, ON
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Canada

Tel (613) 632-5200

PURCHASE ORDER PO040976

Supplier: SKY002-VC
Skyservice
6120 Midfield Road
Mississauga
ON
L5P 1B1 Canada
Phone: 905-678-5636
Fax: 905-678-5841

PO No: PO040976
PO Date: 9/11/18
Due Date: 9/13/18
Purchase Order Revision:
Revision Date:
Ship-To Contact: Lavoie, Chantal
Phone: clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground
Pynt Terms: Net 30
Freight Terms:
Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	180615	D4464-041	Fuel Tank Assembly : Various STC's ISSUE P/O LIQUID PENETRANT INSPECTION AS PER QSI 038 OR LPI AS PER ASTM 1417 LEVEL 2	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
2	178952	D407-667-205	Aft Crosstube - High 407 : TC STC SH01-5 Issue 3, FAA STC SR01304NY 05/12/15, JCAB JAPAN STC-32-OSA 02/02/28, EASA STC EASA.IM.R.S.01179 06/07/03, BRAZIL 2009S08-16 09/08/25, BRAZIL 2009S08-17 09/08/25 *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 0380	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
179372		1 X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
179373		1 X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
179374		1 X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
181961		1 X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
181962		1 X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
Sub Total:							6	0	6		\$697.06

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040976

Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
3	174618	D350-748-101	FWD Crosstube AS350 / AS355 : TC STC SH06-27 Issue 2, FAA STC SR02359NY 11/03/04, EASA STC EASA.10016903 Revision 2 10/09/03, BRAZIL 2009S04-04 09/04/06 Issue P/O: Stress relief at 375degree for 5hrs Magnetic Particle Inspect per ASTM E1444 Cad Plate per AMS-QQ-P- 416B, Class 1, Type 2 Embrittle relief at 375 defree for 8 hrs, Chromate Treat C of C req'd	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
	174634	X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
	174639	X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
	174642	X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
	174643	X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
Sub Total:							5	0	5		\$580.88
4	174673	D350-748-201	Aft Crosstube AS350 / AS355 : TC STC SH06-27 Issue 2, FAA STC SR02359NY 11/03/04, EASA STC EASA.10016903 Revision 2 10/09/03, BRAZIL 2009S04-04 09/04/06 ISSUE P/O TO METCOR: AFTER BENDING: STRESS RELIEF AT 650° F ± 25° F FOR A MINIMUM OF 2 HRS AIR COOL TO AMBIENT TEMPERATURE note: crosstube made from 4130 seamless steel tube DETAIL C OF C REQUIRED	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
	174674	X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
	174676	X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
	181140	X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
	181141	X	SEP 13 2018	Firmed	-	9/13/18	1 pcs	0 pcs	1 pcs	\$116.17647/pcs	\$116.18
Sub Total:							5	0	5		\$580.88



Dart Aerospace Ltd.

1270 Aberdeen St

Hawkesbury, ON

K6A 1K7

Canada

Tel (613) 632-5200

PURCHASE ORDER

PO040976

Items										
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)
										Extended Price
										Grand Total: \$1,975.00
Order Notes										
Procurement Quality Clauses A005 right of entry A012 chemical and physical test report A016 personnel qualification A017 raw material identification (as applicable) A022 Apical Processing A024 process certifications A026 certification of material conformance A041 quality management system A042 dart notification by supplier A043 retension of quality documents A048 counterfeit parts avoidance, detection, mitigation and disposition program A049 supplier awareness Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.										

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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

SUBCONTRACT SHIPPER

SUBCONTRACT SHIP TO	SHIPPER
Ship To: Skyservice 6120 Midfield Road Mississauga, ON L5P 1B1 Canada Phone: 905-678-5636 Fax: 905-678-5841	Shipper No: 614 Shipper Date: 9/13/18 Carrier: * Ship Via: Vehicle Reg: Note: Freight Terms:

Part Information	
Part No: D350-748-101 Cust Part No: D350-748-101 Reference No: Part Information Note: DWG REV H IPP Rev:A New Issue 06-07-05 JLM IPP Rev:B Update qty of MS21042L5 06-09-12 KJ VERIFY BY:DD IPP Rev:C Rev B 07-11-15 DD IPP Rev D Combined manufacturing 08.04.02 EC verified by: DD IPP Rev:E 08-06-24 revD as per dwg DD verified by:EC IPP Rev:F 10.08.04 added QSI010 4.3 DD ver:EC IPP REV:G ADD UNDER BEND COMMENT 12-05-28 JLM IPP REV:H 12.11.05 as per dwg D350-748-141G DD ver:JLM IPP REV:I 15.03.19 as per dwg D350-748-141revH dd ver:jlm Drawing No: Program: Program Customer: Addl Docs: Commercial: Product Line: Crosstube - High Primary OEM Application: Airbus Manufacturer: DART Advertised on web?: No Shipping Dims & Weights: Metric: L2.29m x W0.86m x H0.18m,Actual Weight of 26.31 kg Shipping Dims & Weights: Imperial: L90" x W34" x H7",Actual Weight of 58 lbs	Name: FWD Crosstube AS350 / AS355 Product Family: Landing Gear Piece Weight: 0 lbs Alloy Type: Alloy - Temper: - Description: TC STC SH06-27 Issue 2, FAA STC SR02359NY 11/03/04, EASA STC EASA.10016903 Revision 2 10/09/03, BRAZIL 2009S04-04 09/04/06 Quantity:
OPERATION	
Operation: Outsource - 174 Description: ISSUE P/O TO SKYSERVICE: Note:	

DETAIL								
Part	Operation	PO	Job	Container	Heat Code	Net Weight (lbs)	Gross Weight (lbs)	Quantity
D350-748-101 09/20/2017 LMC Can Only Be Sold To AVIC. Discontinued And Replaced By D350-748-103. Oversized Item, Please Refer To Shipping Instructions.	Outsource ISSUE P/O TO SKYSERVICE:	PO040976	174634	S093239		0	0	1
			174639	S093544		0	0	1
			174642	S093602		0	0	1
			174618	S093751		0	0	1
			174643	S093762		0	0	1
D350-748-201 09/20/2017 LMC Can Only Be Sold To Avic. Discontinued And Replaced By D350-748-203.	Outsource ISSUE P/O TO SKYSERVICE:	PO040976	174673	S094573		0	0	1

9/13/2018

Oversized Item, Please Refer To Shipping Instructions.

[Dart Hawkesbury] Subcontract Shipper - Lavoie, Chantal

			174674	S094587		0	0	1
			174676	S094598		0	0	1
			181140	S095319		0	0	1
			181141	S095366		0	0	1
D407-667-205 09/20/2017JR Oversized Item, Please Refer To Shipping Instructions.	Outsource *** WEAR LATEX GLOVES WHEN HANDLING CROSSTUBE*** Liquid Penetrant Inspection as per QSI 0380	PO040976	181961	S103098		0	0	1
			178952	S103104		0	0	1
			179373	S103183		0	0	1
			179372	S103185		0	0	1
			181962	S103187		0	0	1
			179374	S103902		0	0	1
D4464-041 09/20/2017JR D4464-041 Aux Fuel Tank Reservoir (Ref. D350-794-141) Is About 0.25" Longer Than The D4055-041 Aux Fuel Tank Reservoir (Ref. D350-794-041); Please Contact Technical Support For More Details (Ref.: Case 9383).	Outsource ISSUE P/O : _____ LIQUID PENETRANT INSPECTION AS PER QSI 038 OR LPI AS PER ASTM 1417 LEVEL 2	PO040976	180615	S100152		0	0	1
Total			17			0	0	17

Driver Signature

Customer Copy

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 Work Order Traveler Sky Service F.B.O. Inc.			
10105 Ryan Avenue, Dorval, Quebec, H9P 1A2		TCCA AMO 53-89 / EASA 145.7142 / BDA AMO 385	
WO #: MWO37372	Customer: Dart Aerospace Ltd.	Dept: NDT YUL	Reference: PO040976
Descr:	PN:	S/N:	Qty: 1
Make:	Model:	Reg:	A/C S/N:
TSN:	CSN:	TSO:	
Task: UNSCHEDULED			Sequence: 1

Work Required:

CARRY OUT NDT ON:

1 FUEL TANK , P/N# D4464-041 , J/S# 180615 ✓

6 AFT CROSSTUBES , P/N# D407-667-205 , J/S# 181961 , 181962 , 179372 , 179373 , 179374 , 178952 ✓

5 FWD CROSSTUBES , P/N# D350-748-101 , J/S# 174618 , 174639 , 174642 , 174643 , 174634 ✓

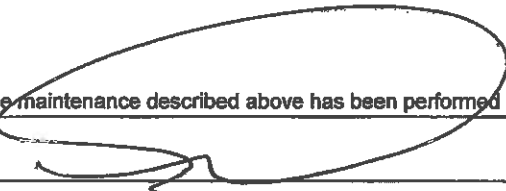
5 AFT CROSSTUBES , P/N D350-748-201 , J/S# 174673 , 174674 , 174676 , 181140 , 181141 ✓

Action Taken:	Date:	Initial/Stamp:
LPI C/O IAW ASTM E-1417 REV. 16 3 LEAKS FOUND IN FUEL TANK REMAINING ITEMS: NO CRACK FOUND PEN. ZL-56, MPO13600, CLEANER SKC-S MPO13923 , DEV. MPO11715 , UV LIGHT M-20142	SEP 11 2018	 

DAS
38
9-89

Description	Location	P/N	Qty	Batch	S/N Off	S/N On

I certified that the maintenance described above has been performed in accordance with the applicable standard of airworthiness.

Signature: 	ACA/SCA Stamp 	Date: SEP 11 2018
Name: RAEK MELIKIAN		